

# EXHIBIT 1

Tushar Ghosh, Ph.D. 6/10/2021

1 IN THE UNITED STATES DISTRICT COURT  
2 FOR THE SOUTHERN DISTRICT OF OHIO  
3 WESTERN DIVISION (CINCINNATI)

4 SARA HAWES, ET AL.

\*

\* Civil Action:  
\* 1:17-CV-00754

5 VS.

\* Judge Timothy S. Black

6 MACY'S WEST STORES, INC.

\*

10 \*\*\*\*\*

11 ORAL AND VIDEOTAPED ZOOM DEPOSITION OF  
12 TUSHAR GHOSH, PH.D.

13 JUNE 10, 2021

14 \*\*\*\*\*

15  
16  
17 ANSWERS AND DEPOSITION OF TUSHAR GHOSH, PH.D.,  
18 produced as a witness at the instance of the Plaintiffs,  
19 taken in the above-styled and -numbered cause on the  
20 10th day of June, 2021, at 8:58 a.m., before Susan M.  
21 Foreman, a Certified Shorthand Reporter in and for the  
22 State of Texas, via Zoom teleconference, in the City of  
23 Dallas, County of Dallas, and State of Texas, in  
24 accordance with the agreement hereinafter set forth or  
25 in accordance with the Federal Rules of Civil Procedure.

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25 ALSO PRESENT: Mr. Brian James, videographer

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## 11 EXHIBITS

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1 Q. Why, to your knowledge, does the textile  
2 industry use ASTM standards?

3 A. Well, they are pretty thorough; the process is  
4 very good. And they cover a lot of ground, and of  
5 course, you know, there are a lot of, I would say,  
6 standards that they put out and update them on a regular  
7 basis, so...

8 Q. And are the standards for the textile industry  
9 that are published by the ASTM something that folks in  
10 the textile industry follow?

11 A. Oh, generally speaking, yes, yes.

12 Q. And, generally speaking, they're the industry  
13 standards that the industry recognizes -- sorry, let --  
14 let me ask that a different way.

15 The -- the ASTM standards for the textile  
16 industry are recognized by the textile industry as the  
17 industry standards that they should follow, right?

18 A. ASTM and many others. ASTM happens to be at  
19 the top, yes.

20 Q. Okay.

21 The ASTM is at the top of the standards  
22 that the textile industry follows?

23 A. There's others too. I mean, if you -- if  
24 you're asking me to rank, ASI, DIN, and there are many  
25 other standards organizations like that, no, I'm not

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1 doing that. ASTM is a pretty well-respected  
2 organization. They put out standards, and then they  
3 cover a lot of ground.

4 Q. And -- and the standards of the ASTM, one of  
5 which is -- relates to thread -- testing for the thread  
6 count of textiles, right?

7 A. Yes.

8 Q. And, to your knowledge, is that standard  
9 entitled D3775?

10 A. Yes.

11 Q. And the ASTM standard D3775 is the recognized  
12 industry standard for the way in which the textile  
13 industry counts threads, true?

14 A. Yes, generally speaking, yes.

15 Q. And if one were to make an effort to count the  
16 threads in a woven textile, one should follow the ASTM  
17 standards, right?

18 A. Yes, that's one of the standards, yes. As I  
19 say, the ASTM is --

20 Q. And the purpose of --

21 A. Sorry, I did not finish.

22 Q. And I'm sorry. Go -- go ahead.

23 A. The ASTM is one of the standards organizations  
24 of a few -- and many, I should say, well-respected  
25 standards organizations around the world.

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1 Q. Are there other standards that are promulgated  
2 for the textile industry relating to thread count other  
3 than ASTM?

4 A. Oh, I'm sure there are others, but  
5 professionally I follow ASTM.

6 Q. In your professional opinion, follow- --  
7 following the ASTM 3775 is the appropriate way to count  
8 threads?

9 A. Sure.

10 Q. And that's recognized not just in the United --  
11 excuse me.

12 That standard is recognized not just in the  
13 United States, but also globally. Is that fair?

14 A. Yeah.

15 Q. I'm trying to share my screen, and I'm having  
16 trouble. Bear with me.

17 Do you see that document, Dr. Ghosh?

18 A. Yes, I do.

19 Q. What is it?

20 A. That's the standard that you have been talking  
21 about, 3775.

22 MR. COCHRAN: Susan, I'm going to mark this  
23 as Exhibit 2, please.

24 (Exhibit Number 2 marked.)

25 Q. Dr. Ghosh, Exhibit 2 is -- the title at the top

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1 says, Designation D3775-12, Standard Test Method for  
2 Warp (End) and Filling (Pick) Count of Woven Fabrics.

3                   This is the ASTM standard for the proper  
4 way to count threads, right?

5                   MR. RODENBOOUGH: Objection, form.

6                   A. There is a more up-to-date version than 12.

7 There is a 3775-17.

8                   Q. Fair enough. We'll get to that. Exhibit 2,  
9 the document in front of you, is the standard as it  
10 existed at Version 12, right?

11                  A. Yeah.

12                  Q. And -- and -- and my point is, I just want to  
13 make clear that we're talking about the same thing.  
14 These -- this -- this document, the D3775 document, is  
15 the ASTM standard that you've identified as the standard  
16 that's recognized in the industry for counting threads,  
17 true?

18                  A. Yeah.

19                  Q. Can you -- are you familiar -- familiar with  
20 the contents of Exhibit 2?

21                  A. Yes.

22                  Q. Can you show me in here, sir, where the  
23 standard takes into account the way in which a fabric is  
24 manufactured?

25                  MR. RODENBOOUGH: Objection, form.

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1 You can answer.

2 A. This is not a standard that addresses  
3 manufacturing of fabrics. It just talks about how to  
4 count ends and picks.

5 Q. And in counting end and picks, can you show me  
6 where in this standard it says to take into account the  
7 manufacturing process?

8 MR. RODENBOOUGH: Objection, form.

9 You can answer.

10 A. I'm not sure what you mean by that. There  
11 are -- if you follow textile manufacturing, there are  
12 in- -- almost infinite way to manufacture a fabric, that  
13 would, at the end, be a fabric. Standards don't take  
14 that into account, most standards, and it's just one of  
15 those. It just talks about the fabric, woven fabric,  
16 where you two sets of yarns and then they're interlaced  
17 perpendicular to each other and all that, that they are  
18 describing where you wove it. It's just a woven fabric.

19 Q. Right. So this document, Exhibit 2, talks  
20 about the way to count the fabric after it's  
21 manufactured, not the manufacturing process itself,  
22 true?

23 A. Yeah. I mean, it just talks about, yes,  
24 counting picks and ends in a woven fabric. It does not  
25 address issues relative to manufacturing of the fabric.

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1 Q. I'm sorry, I could not understand the second  
2 part of that answer. Would you repeat it?

3 A. It does not address the issues related to the  
4 manufacturing of the fabric.

5 Q. So someone counting threads pursuant to this  
6 standard, D3775, should not take into account the way in  
7 which the fabric is manufactured; is that true?

8 MR. RODENBOUGH: Objection to form.

9 A. It's not should not. This standard would apply  
10 to almost any fabric that's manufactured in a weaving  
11 process.

12 Q. Maybe "should" is a bad word. Someone  
13 conducting a thread count test pursuant to D3775 need  
14 not consider the manufacturing process?

15 MR. RODENBOUGH: Objection to form.

16 A. No, I would not say that. So let -- I'll give  
17 you an example, give you --

18 Q. Why?

19 A. Because there are fabrics that are made with  
20 more than two sets of threads, not just warp and  
21 filling. There are two sets of warp, one set of  
22 filling, so there are more complex structures where this  
23 standard will not apply. So -- even though they're  
24 really small in -- in -- in quantity. So I'd say when  
25 you talk about woven fabric, this standard would apply

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1 in general to woven fabric that fall in that broader  
2 category, that pretty much everybody knows. But there  
3 are others that -- so someone looking at the fabric  
4 should have at least the basic knowledge to recognize  
5 what he is -- he or she is looking at.

6 Q. Okay.

7 I think I heard you say that there are some  
8 fabrics to which this standard does not apply?

9 A. There are --

10 Q. Did I hear you right?

11 A. Yes.

12 Q. What fabrics are those?

13 A. Oh, well, there is something called a triaxial  
14 fabric.

15 Q. Can you spell that?

16 A. T-R-I-A-X-I-A-L fabric.

17 Q. Okay.

18 Does -- does a triaxial fabric have  
19 anything to do with this case?

20 Did you hear me, sir?

21 MR. RODENBOUGH: I think he looks frozen.

22 MR. COCHRAN: Yeah. Wait a sec.

23 MR. RODENBOUGH: He's gone.

24 THE VIDEOGRAPHER: Yeah. Looks like we  
25 just lost him.

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1 I'm going to go ahead and go off the video  
2 record.

3 We're off the video record. The time is  
4 9:27.

5 (Brief recess.)

6 THE VIDEOGRAPHER: We're on the video  
7 record. The time is 9:35.

8 Q. Excuse me. Dr. Ghosh, before our snafu, we  
9 were talking about fabrics to which the ASTM D3775 does  
10 not apply, and you identified triaxial fabric. Are  
11 there other woven fabrics to which 3775 does not apply,  
12 in your opinion?

13 A. Not offhand, no. But I guess there are other  
14 structures, yes.

15 Q. Does D -- Standard D3775 apply to CVC sheets?

16 A. By that do you mean the ones that I looked at?  
17 Yes.

18 Q. The ones you looked at and, more globally, the  
19 appropriate way in the textile industry to count threads  
20 in CVC see- -- CVC sheets is pursuant to this standard,  
21 true?

22 A. Yes.

23 Q. The -- to your knowledge, is there a committee  
24 with textile-specific people that come up with the  
25 Standard D3 -- I'm just going to call it 3775. Let me

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1 A. I think it's just less than 8,000, if I -- if  
2 I'm not totally off, but it's close to that.

3 Q. So as of today for your work in offering your  
4 opinions in this case, you've received or billed  
5 approximately \$21,000; is that fair?

6 A. Well, I -- I -- I don't have the numbers in  
7 front of me, so I can't say for sure, but maybe you're  
8 right.

9 Q. And if you're required to travel to testify at  
10 trial or at a class certification hearing, you would  
11 charge \$3,000 a day; is that accurate?

12 A. Yes.

13 Q. Is that in addition to incidental expenses,  
14 like hotel, airfare, et cetera, or is that included?

15 A. Oh, that's addition to that.

16 Q. Okay.

17 I'm now looking at the spec that lists --  
18 excuse me, the following paragraph, paragraph 5, lists  
19 the things you -- the documents you reviewed, and then  
20 it talks about an interview you had with employees of  
21 Creative Textiles, and that includes Vijay Agrawal,  
22 A-G-R-A-W-A-L [sic].

23 MR. COCHRAN: Susan, I'll scroll down so  
24 you can see it. That will be easier. In the footnote.

25 Q. You had a conversation with Vijay Agrawal,

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1 Saching Kulkarni, and Parag Tejani; is that right?

2 A. Yes, the second name, the first name is kind of  
3 -- I think there is a misspelling. I think it should be  
4 a G is not there, S-A-C-H-I-N, Sachin Kulkarni.

5 Q. Sachin. Thank you.

6 A. That would be my guess.

7 Q. When --

8 A. I mean, that's usually the name. Sorry. Yes.

9 Q. Thank you, that's helpful. When was this  
10 interview?

11 A. I cannot tell you the exact date. I should  
12 have looked up, but I don't -- I don't really remember,  
13 I'm sorry.

14 Q. Sometime between the time you were hired and  
15 the time you issued this report on May 1st of 2021, you  
16 had this interview, right?

17 A. Yes.

18 Q. Was it one interview, was it a series of  
19 conversations, what was it?

20 A. Just one conversation, yes.

21 Q. Was it a telephone call, a Zoom call? Did you  
22 fly to India?

23 A. I believe it was a Zoom call.

24 Q. How long did the phone call last?

25 A. I cannot tell you for sure.

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1                   MR. RODENBOUGH: Object (inaudible).

2                   THE WITNESS: Andy, I didn't hear you.

3                   MR. RODENBOUGH: I just said objection to  
4 form, Tushar. You can -- you can go on.

5                   A. I -- I don't remember how long it lasted.

6 Maybe half an hour to 40 minutes I would venture to  
7 guess.

8                   Q. What was the purpose of your phone call with  
9 the employees of Creative Textiles?

10                  A. To know about their manufacturing process.

11                  Q. Why was it important to you to understand their  
12 manufacturing process?

13                  A. Well, when I looked at the fabric, I saw  
14 something that prompted me to -- saw something that was  
15 not usual that prompted me to put things together, and I  
16 had the patent, of course, and to put the two together,  
17 I had to get some more information.

18                  Q. What was unusual about the fabric? Well, let  
19 me back up one second. What fabric did you examine that  
20 you felt was unusual?

21                  A. I think there was one bedsheet that was  
22 provided to me at that time, and that's what I'm talking  
23 about.

24                  Q. And that would have been, to your recollection,  
25 the Somers- -- Somerset sheet that was provided by Mr.

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1                   And I want to talk specifically about the  
2 CVC sheets. Would you agree with me that Somerset are  
3 CVC sheets?

4                   A. I'm not too familiar with that term, CVC,  
5 honestly, so yeah, if you do put that moniker, I'm fine  
6 with that.

7                   Q. Do you know what a Chief Value Cotton sheet is,  
8 sir?

9                   A. Now I do, yes.

10                  Q. Before you were hired in this case, did you  
11 know what a Chief -- Chief Value Cotton sheet was?

12                  A. Heard about it, but I didn't know as much.  
13 It's -- it's just a name. It's --

14                  Q. I'm sorry, could you --

15                  A. It's -- it's just a name that's attached to a  
16 -- to a product. I think there are many, many fabrics  
17 that are kind of similar, so...

18                  Q. Oh, okay.

19                  Let me ask it again, because I'm not sure I  
20 understood your answer. Before you were hired to serve  
21 as an expert witness in this case, did you know what a  
22 Chief Value Cotton sheet was?

23                  A. I did, but not so well. Now I know.

24                  Q. And had you ever count -- done a thread count  
25 pursuant to 3775 of a Chief Value Cotton sheet prior to

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1 this case?

2 A. Yes.

3 Q. Okay.

4 When did you do a thread count of a Chief  
5 Value Cotton sheet before this case?

6 A. I cannot tell you that. Let me clarify. This  
7 particular bedsheet is called Chief Value Cotton, but  
8 there are many other fabrics that are not called by that  
9 name but they're exactly the same.

10 Q. Okay.

11 A. It's -- it's just a --

12 Q. There are other sheets -- I'm sorry. Go ahead.

13 A. There are other textile products.

14 Q. There are other what?

15 A. Textile products.

16 Q. There are other --

17 A. It doesn't have to be a sheet. It doe- --

18 Q. -- products?

19 A. Yes, it doesn't have to be a sheet.

20 Q. Okay.

21 Let me ask the question a different way.

22 Prior to this case, had you ever test -- done a thread  
23 count test of a Chief Value Cotton textile of any kind?

24 A. That had a label on it, Chief Value Cotton, no,  
25 I have not.

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1                   After you examined the sheet, you had your  
2 conversation with the folks at Creative. How did you  
3 arrange that telephone call?

4                   A. Well, I called up. I think I had spoken to  
5 Jennifer, that I need to talk with these folks. And she  
6 --

7                   Q. And Jennifer facilitated the -- I'm sorry. I  
8 keep doing that, I'm sorry.

9                   A. And -- and she facilitated that.

10                  Q. Did the lawyers participate in the phone call  
11 or just you and the Creative folks?

12                  A. They were there.

13                  Q. They were where?

14                  A. On the call.

15                  Q. The lawyers were on the phone call with you  
16 with the folks at Creative?

17                  A. Yes.

18                  Q. And who led the discussion?

19                  A. On -- I did. I asked the questions.

20                  Q. Okay.

21                  I want you to tell me as specifically as  
22 you can what you recall about that conversation.

23                  A. I asked them about their processes.

24                  Q. Asked them about their processes for what?

25                  A. For the weaving that they used.

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1 Q. What did they tell you?

2 A. They tell -- they told me they used a process  
3 that's described in that patent, how the filling yarn,  
4 or what they call multi-pick filling packages, are  
5 prepared, what kind of looms they used, the weaving  
6 machines they used.

7 Q. All right.

8 They told you about the technology and --  
9 and they told you that they -- in manufacturing the CVC  
10 sheets that they used the technology described in the  
11 patent; is that right?

12 A. Yes.

13 Q. And then they described the weaving machines  
14 that they used. What else did they describe?

15 A. That's it.

16 Q. Did you -- prior to this phone call, did you  
17 have an understanding of the patent they were referring  
18 to?

19 A. Yeah, because I looked at it, yes.

20 Q. You looked at the patent in advance of the  
21 phone call?

22 A. Yes.

23 Q. Why did you look at the patent?

24 A. That was provided to me.

25 Q. And the pat- -- the patent was provided to you

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1 by the lawyers?

2 A. Yes.

3 Q. Did -- did the lawyers provide you any  
4 additional facts or data about the patent that you  
5 considered in forming your opinion?

6 A. No.

7 Q. What did they tell you -- sorry. What did  
8 Creative tell you about the process -- let me ask that a  
9 different way.

10 What did the folks at Creative tell you  
11 about the technology they used to create the CVC sheets?

12 A. So there are two parts to the process that  
13 would be relevant in understanding the fabric structure.  
14 One is the multi-pick package preparation and the  
15 weaving. That's what we discussed.

16 Q. And what did they tell you about the multi-pick  
17 package?

18 A. It is explained in my supplemental report, I  
19 think in a little more detail, but if you just help me  
20 explain using that figure, I think it would be good;  
21 otherwise, I can just, you know, describe it using --

22 Q. Yeah, we'll -- we'll -- we'll get to the --  
23 we'll get to the technology itself. Right now I'm  
24 interested in -- in what the Creative people told you  
25 about the technology. What did they tell you about the

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1 multi-pick package?

2 A. Well, they take a bunch of sup- -- supply  
3 packages, as many as they need, depending on what  
4 they're doing. They put it through the texturing  
5 process individual yarns, a false-twist texturing  
6 process, and then they assemble the yarns side by side  
7 flat and wind on a take-up package that is used as a  
8 filling-in supply package on weaving machines.

9 Q. What else did they tell you about the  
10 multi-pick package?

11 A. That is it.

12 Q. Okay.

13 What about the weaving process, what did  
14 they describe to you about that?

15 A. That they use an air jet weaving machine.

16 Q. Air jet?

17 A. Yes. If I remember it right, yes.

18 Q. What's your understanding of an air jet weaving  
19 machine?

20 A. What is that you want to know, how it works or?

21 Q. Yeah, let me -- let me ask it a different way.

22 What else did Creative tell you about the  
23 air -- their -- the use of the air jet weaving machine?

24 A. That is what they told me, that they use air  
25 jet weaving machines to weave this fabric. And of

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1 course I am familiar with how that works, so I didn't  
2 ask them questions.

3 Q. Do you know -- I want to ask about these in --  
4 well, before I do that. Other than describing the use  
5 of the technology and the air jet weaving machines, what  
6 else did you-all talk about?

7 A. Nothing.

8 Q. Did you talk about this lawsuit at all?

9 A. Nope.

10 Q. Do you know what Vijay Agrawal's position is at  
11 Creative Textiles?

12 A. I -- I don't. He mentioned, but I don't  
13 remember.

14 Q. What about Sachin?

15 A. I'm sorry, each one of them introduced  
16 themselves, but I did not -- I -- I don't remember.  
17 Yes, I -- I don't.

18 Q. Did you understand they were -- did -- did you  
19 have an understanding if they were employees or officers  
20 of the company?

21 A. Yes, that's how they introduced themselves.

22 Q. Yeah. And I think that was a bad question.  
23 Were they low-level employees or were they executive  
24 types?

25 A. I think they are -- they knew what they were

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1 saying, so I would say they -- they're higher up. I  
2 think Mr. Kulkarni was the tech- -- technical person.  
3 He was the most knowledgeable about everything, Mr.  
4 Kulkarni.

5 Q. Did you have any written communications with  
6 anyone at Creative Textiles?

7 A. No.

8 Q. Other than this 30- to 40-minute conversation  
9 with the employees of Creative, did you have  
10 communications with anyone else at Creative?

11 A. No.

12 Q. Did you ever go to India and inspect their  
13 weaving process?

14 A. No.

15 Q. Did you ever go to India and inspect to -- just  
16 to make sure they were using the technology that's  
17 described in the patent?

18 A. No.

19 Q. Did you do anything else besides this 30- or  
20 45-minute conversation to assure yourself that they were  
21 actually using the technology described in the patent?

22 A. You mean anything, meaning subsequent to that?

23 Q. Sure, yes, sir.

24 A. Yeah, so -- so I looked in that -- in all of  
25 this conversation information that I got and the patent,

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1 and my hunch, we -- I looked more into the fabric in a  
2 greater detail that I describe in my -- my report.

3 Q. Yes, sir, and we'll get to the examination of  
4 the fabric in a minute. Other than the examination of  
5 the fabric and the conversation with Creative, did you  
6 do anything else to assure yourself that the technology  
7 that they described that they used was actually being  
8 used?

9 A. No, I did not.

10 Q. Did you witness with your own eyes that the  
11 polyester filling was laid in side by side?

12 A. No, I did not.

13 Q. Have you ever seen CVC sheets being  
14 manufactured at all?

15 A. Well, I have -- I have -- the -- the work  
16 experience that I have, we used to manufacture  
17 bedsheets, and in those days they didn't call them CVC  
18 sheets, but they were exactly -- pretty much the same, I  
19 wouldn't say exactly, a cotton-polyester blend of the  
20 same kind.

21 Q. You manufactured those there at North Carolina  
22 State in the lab?

23 A. No, that was not -- no, that was my work  
24 experience back in India. I worked with one of the  
25 largest textile manufacturer then of towels and sheets

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1 Q. Have you had any conversations with any  
2 employees of AAVN, Inc.?

3 A. No.

4 Q. Okay.

5 Sir, I pulled back up Exhibit 1, which is  
6 your report. Can you see it?

7 A. Yes.

8 Q. Okay.

9 Turning to the next page, paragraph -- I'm  
10 sorry, 6. It says you examined four sets of sheets, one  
11 is the Somerset that we've spoken about, and then an  
12 additional three, Optimal Performance, Fairfield Square,  
13 and Camden. Those were sheets that were provided to you  
14 by the lawyers; is that right?

15 A. Yes.

16 Q. Do you know where the lawyers got those sheets,  
17 if they were from retail or from the manufacturer, do  
18 you know where they came from?

19 A. Not quite sure. I think they -- I'm not quite  
20 sure.

21 Q. You don't know one way or the other?

22 A. No.

23 Q. Do you know when the Somerset sheets that you  
24 examined were manufactured by Creative?

25 A. I have no idea.

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1 Q. Do you know when the Optimal Performance sheets  
2 that you examined were manufactured by Creative?

3 A. I don't know.

4 Q. Do you know when the Fairfield Square sheets  
5 that you examined that were manufactured by Creative  
6 were manuf- -- were -- were manufactured?

7 A. I don't.

8 Q. Do you know when the Camden sheets were  
9 manufactured?

10 A. No.

11 Q. Do you have an understanding that Creative has  
12 licensed the patent they claim to manufacture the sheets  
13 in accordance with?

14 A. Can you repeat that?

15 Q. Sure.

16 Do you know if Creative has a license to  
17 use the patent?

18 A. I do not know.

19 Q. Don't know one way or the other?

20 A. No.

21 Q. So at the time that the sheets you examined  
22 were manufactured -- strike that.

23 Okay, sir. I'm on page 11 of your report  
24 here, Exhibit 1. And the patent you have been  
25 describing as U.S. Patent Number 9,131,790, and you

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1 and, yes, look at it at a higher magnification using a  
2 microscope, yes.

3 Q. At any point in your examination of the  
4 Somerset sheets did you perform a thread count pursuant  
5 to the ASTM?

6 A. No, I did not.

7 Q. At any point in your examination of the Optimal  
8 Performance sheets did you perform a thread count  
9 pursuant to the ASTM?

10 A. No.

11 Q. At any time in your examination of the  
12 Fairfield Square sheets did you perform a thread count  
13 test pursuant to the ASTM?

14 A. No.

15 Q. At any time in your examination of the Camden  
16 sheets did you perform a thread count test pursuant to  
17 the ASTM?

18 A. No.

19 Q. So, sir, based upon the ASTM standard, you're  
20 not offering an opinion as to what the actual thread  
21 count of the sheets are?

22 A. I am not offering an opinion on the thread  
23 count but on the methods that's been -- that I have seen  
24 been used and the method that should be used, and that  
25 -- that's my opinion. You know, when you -- when you

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1 Q. Yes, sir. I'm look- -- I'm talking about the  
2 image depicted in Figure (c).

3 A. Yeah, it's -- it's I think roughly about 400 or  
4 so, 400 some, 430, 450 microns, I would say.

5 Q. About the size of three or four human hairs?

6 A. Yeah.

7 MR. RODENBOUGH: Object to the form.

8 Q. And even at that magnification, we can't see  
9 the individual threads, can we?

10 A. Individual yarns, yes, you don't see the  
11 boundaries, yes.

12 Q. Did you bring with you today, sir, any in- --  
13 instruments by which you could count threads?

14 A. No.

15 Q. If I ask you to count the individual polyester  
16 yarns in the Somerset sheets, could you do so?

17 A. No, I don't.

18 Q. No, you could not?

19 A. I -- I could not.

20 Q. Okay.

21 Dr. Ghosh, I am pulling up what I'm going  
22 to mark as Exhibit 4.

23 (Exhibit Number 4 marked.)

24 Q. This is a supplemental report dated June 3rd of  
25 2021. Do you recognize that?

**Tushar Ghosh, Ph.D. 6/10/2021**

1 A. -- of yarns in --

2 Q. -- Somerset sheet -- I'm sorry?

3 A. Yes. I was going to say a bundle of yarns in  
4 the filling direction, or the weft direction. That's  
5 number (c). And that's the plan -- planar view, plan  
6 view, if you look at it from the top, and (d) is the  
7 side view.

8 Q. And can you identify the individual polyester  
9 yarns in Figure (c)?

10 A. No. Can I -- can I take a -- one moment to --  
11 to elaborate on -- on the same point that you are making  
12 in (inaudible) --

13 Q. Yeah, let me -- let me -- let me finish this,  
14 and then you can -- then you can elaborate, okay?

15 A. Okay. Sure.

16 MR. COCHRAN: And object to nonresponsive  
17 after "no."

18 Q. Figure 3 is -- are images of the  
19 Fairfield-Sydney brand sheets, correct?

20 A. Yes.

21 Q. And, again, Image (c) is the bundle of  
22 polyester yarns in the weft direction, true?

23 A. Yes.

24 Q. Can you identify the individual polyester yarns  
25 in Figure (c)?

**Tushar Ghosh, Ph.D. 6/10/2021**

1 A. No.

2 Q. Figure 4 is Optical micrographs of the Optimal  
3 brand fabric, right?

4 A. Yes.

5 Q. And, again, I want to focus on Figure (c),  
6 which is a bundle of polyester yarns in the weft  
7 direction, true?

8 A. Yes.

9 Q. Can you identify the individual polyester yarns  
10 in Figure (c)?

11 A. No.

12 Q. I'm now on page 7 of your supplemental report.

13 A. Can I -- bef- -- before you go to another --  
14 I'm assuming --

15 Q. Yes, sir, you may elaborate, yes, sir.

16 A. Yes, please. Can you go back to one of those  
17 figures, please.

18 Q. Go back to what?

19 A. Any one of those figures that we were talking  
20 about, any of those figure plates. Yeah. So -- so one  
21 point that you have to appreciate that, you know,  
22 considering everything, considering the scale, the  
23 dimensional scale and the material and everything,  
24 counting number of picks and ends is not a simple  
25 matter. I did not set out to do that in this -- in this

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1 Q. Dr. Ghosh, did you dissect the fabric with a  
2 needle to try to count the individual polyester yarns?

3 A. No. As -- as I told you, I set out not to do  
4 the counting. No, that was not my objective. I -- I  
5 know I'm not qualified to do that. I don't have the  
6 experience.

7 MR. COCHRAN: No more questions.

8 MR. RODENBOUGH: Okay.

9 THE VIDEOGRAPHER: All right. That  
10 concludes the deposition. The time is 12:42.

11 (End of proceedings.)

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